APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,041	06/26/2003	David Meiri	EMS-04901	6411

7590 07/14/2005	EXAMINER	
Choate, Hall & Stewart	ELMORE, STEPHEN C	
Patent Group		
Exchange Place	ART UNIT	PAPER NUMBER
53 State Street	2186	
Boston, MA 02109-2804		

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	**Applicant(s)**
Office Action Summary	10/607,041	MEIRI ET AL.
	Examiner	**Art Unit**	
	Stephen Elmore	2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 June 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>1-5</u> is/are allowed.

6)☒ Claim(s) <u>6,7 and 11-20</u> is/are rejected.

7)☒ Claim(s) <u>8-10</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>26 June 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
    application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

STEPHEN C. ELMORE
PRIMARY EXAMINER

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/8/03</u>.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

1.   This Office action responds to the Continuation-in-Part application filed June 26, 2003.

2.   Claims 1-20 are presented for examination.

Specification

3.   The disclosure is objected to because of the following informalities:

        a.   The title of the invention is not descriptive, the title so general as to be inadequately

descriptive of the invention (i.e., the novelty of the invention) to which the claims are directed; and

further, any loss in brevity of title by the providing of a more detailed title is more than offset by the

gain in its informative value in indexing, classifying, searching, etc. See MPEP 606 and 606.1;

        b.   The Specification contains patent application numbers at multiple locations which

require their status to be updated to reflect that they have now become US Patents.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of
> making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art
> to which it pertains, or with which it is most nearly connected, to make and use the same and shall set
> forth the best mode contemplated by the inventor of carrying out his invention.

5.   Claims 11-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the

enablement requirement. The claim(s) contains subject matter which was not described in the

specification in such a way as to enable one skilled in the art to which it pertains, or with which it is

most nearly connected, to make and/or use the invention.

        a.   Claims 11-20, each of the claims recite computer software comprising executable code

performing various claimed activities in relation to, for example, data and storage devices, however,

executable code *per se*, that is, code absent any structural, tangible embodiment, such as code being

stored on a computer readable medium, cannot perform any of the recited activities without being

stored on a computer readable medium, since the scope of coverage of executable code *per se* covers

computer programming code that is merely printed, for example, in a computer science textbook,

which if ever in the future is embodied on a computer readable medium and then executed by a

computer system, only then is capable under these circumstances of performing the recited computer

activities in these claims, however, the presently claimed invention lacks the necessary structural

support for making these activities possible, because executable code that is not so embodied cannot

be executed, and therefore, these claims are interpreted as being directed to computer software *per*

se which is non-statutory subject matter because it lacks necessary embodiment in a computer

readable medium and the specification fails to teach one skilled in the art how to make and/or use the

claimed invention to perform the claimed activities absent such an embodiment.

6.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming
> the subject matter which the applicant regards as his invention.

7.   Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing

to particularly point out and distinctly claim the subject matter which applicant regards as the

invention. The claims are indefinite because:

a.   Claims 11-20 are incomplete for omitting essential structural cooperative relationships

of elements, such omission amounting to a gap between the necessary structural connections. See

MPEP § 2172.01. The omitted structural cooperative relationships are:

each of the claims recite computer software comprising executable code performing various

claimed activities in relation to, for example, data and storage devices, however, executable code *per*

se, that is, absent any structural, tangible embodiment, such as being stored on a computer readable

medium, such code under these conditions cannot perform any of the recited activities without being

stored on a computer readable medium, since the scope of meaning of executable code *per se* covers

computer programming code merely printed in a computer science textbook, which if ever in the

future is embodied on a computer readable medium and then executed by a computer system, is

capable under these circumstances of performing the recited computer activities in these claims,

however, the presently claimed invention lacks the necessary structural support for making these

activities possible.

8. .   Claims 7 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as the

invention. These claims are indefinite because:

       a.   the feature where the local storage device commits a set of data is unclear in scope

because this use of language is contrary to the scope of meaning of functionality attributable to

storage devices, since they are storage devices they are passive elements and only store data, a passive

activity, active devices on the other hand such as control devices, processors, etc, have the capability

to perform commit operations, therefore, this language is indefinite because it is contrary to

conventional usage for this terminology.

Claim Rejections - 35 USC § 101

9.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

10.   Claims 11-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to

non-statutory subject matter.

       a.   Claims 11-20, each of the claims recite computer software comprising executable code

performing various claimed activities in relation to, for example, data and storage devices, however,

executable code *per se*, that is, code absent any structural, tangible embodiment, such as code being

stored on a computer readable medium, cannot perform any of the recited activities without being

stored on a computer readable medium, since the scope of coverage of executable code *per se* covers

computer programming code merely printed in a computer science textbook, which, if ever in the

future is embodied on a computer readable medium and then executed by a computer system, only

then is capable under these circumstances of performing the recited computer activities in these

claims, however, the presently claimed invention lacks the necessary structural support for making

these activities possible, because executable code that is not so embodied cannot be executed, and

therefore, it is interpreted that these claims are directed to computer software *per se* which is non-

statutory subject matter.

Examiner's Note: A solution for this problem opens two possibilities, one, Applicant can transform the claims into a statutory **article of manufacture** (for example, computer software on a disk) by amending the claims to recite that the computer executable code is stored on a computer readable medium for performing the claimed activities, or two, Applicant can transform these claims into a statutory computer implemented **process** by amending these claims to recite that the computer executable code is stored on a computer readable medium and is executed by a computer system to perform the claimed activities.

Claim Rejections - 35 USC § 102

11.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis

for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Examiner's Note: following present Office policy, in the following rejections it is noted that Claims 16 and 17 are being rejected on the prior art as if they were statutory under 35 USC 101, based on the premise that the Applicant may easily transform these claims into statutory subject matter upon the next response, and so, by rejecting these claims at this time the benefit of compact prosecution is effected.

12.   Claims 6, 7, 16, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by <u>Vahalia et</u>

<u>al.</u>, US Patent 6,192,408 (hereafter "Vahalia").

Vahalia teaches the claimed method for a host coupled to a remote storage device to read

desired data transmitted by a local storage device and computer software of executable code

(presumed to be embodied on a computer readable medium) comprising:

Claims 6 and 16,

the features,

a.   (executable code for) identifying a most recent and consistent set of data containing

the desired data and obtaining the desired data (taught as client requested data) from the most recent

and consistent set of data (taught as, and giving this language the scope of meaning of the most recent

locked data is the most recently stored data that is consistent because it is locked, and which in at

least some part of an inherent teaching the most recent locked data can also be the actual data

requested by a client therefore meeting this claim limitation),

are taught as a network file server 32 (taught as equivalent to a host) which includes a first set

of processors for receiving requests for data (desired data) from clients, and a second set of processors

for accessing read-write file systems by use of processors that are assigned to manage read and write

locks on the data in a file system, see Abstract, lines 1-11, where the feature identifying a most recent

and consistent set of data containing the desired data is interpreted to mean the inherent process of

identifying the most recent and locked data which can be stored in all or only a portion of a file

residing in the file system which contains the requested data a client is seeking, see Figures 7 and 8,

and see the corresponding description of Figure 8's flow process at col. 13, lines 65 - col. 14, line 40;

Claims 7 and 17,

the feature,

       b.   wherein the set of data is a chunk of data committed by the local storage device,

       is taught, for example, see Figure 9, as the element data mover storing in a local cache

committed file data, giving this language the interpretation that a local storage device, being only a

storage device can only store data (committed) and cannot have control functionality to actually

perform the commit operation, see col. 16, lines 20-25, such interpretation being consistent with the

35 USC 112, second paragraph rejection previously made.

Allowable Subject Matter

13.   Claims 1-5 appear allowable over the prior art of record for the reason that the features, if the

desired data is not part of a chunk of data committed by the other storage device, reading the desired

data from a corresponding standard logical device, and if the desired data is part of a chunk of

data...transferring the desired data to the logical device..., such features being taken in combination

with the remaining claim limitations in independent claim 1 are not found in and or are not obvious in

view of the prior art of record.

14.   Claims 8-10 are objected to as being dependent upon a rejected base claim, but would be

allowable if rewritten in independent form including all of the limitations of the base claim and any

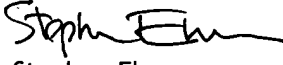intervening claims.

Conclusion

15.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Elmore whose telephone number is (571) 272-4436. The examiner can normally be reached on Mon-Fri from 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stephen Elmore — 7/6/05

Stephen Elmore
Primary Examiner
Art Unit 2186

July 10, 2005